

## ABSTRACT:

The invention relates to a transmitter and a method of generating a transmission signal, which transmitter includes a modulation device (110) for generating two uncompensated transmission signals Y, Z by respective modulation of at least one baseband signal I, Q with an oscillation signal  $X_{LOQ}$ ,  $X_{LOI}$ , the two uncompensated transmission signals Y, Z containing at least one respective interference component, which interference components are phase shifted by a given amount relative to one another.

In accordance with the invention these interference components are eliminated by a compensation circuit that includes an all-pass 120. The all-pass 120 rotates the phase of the interference component to be eliminated in one of the uncompensated transmission signals to overall a phase difference of  $180^\circ$  relative to the phase of the corresponding interference component in the other uncompensated transmission signal. The compensation of the interference component is realized by addition of the output signal of the first all-pass and the other uncompensated transmission signal. The interference component to be eliminated is thus compensated, but the fundamental wave of the transmission signal at the same time is sustained to a high degree.